

In the Claims:

Please amend the claims to read as follows:

1. (Currently Amended) A method to assess therapeutic levels of S-adenosylmethionine (SAM) in a biological fluid sample which method comprises

providing said sample with an effective amount of glycine N-methyltransferase (GMT), an effective amount of a S-adenosyl homocysteine hydrolase (SAHH) or His•SAHH (N-terminal histidine tagged SAHH), and glycine; and

measuring one or more reaction products in said sample wherein the level(s) of said one or more reaction products is directly proportional to the level of SAM in the sample.
2. (Original) The method of claim 1 wherein the product detected is homocysteine (HC).
3. (Original) The method of claim 2 wherein said HC is measured by a method which comprises treating the sample with homocysteinase (HCYase) and measuring the concentration of at least one product obtained by the reaction of HCYase with said homocysteine.
4. (Original) The method of claim 3 wherein the product measured is H₂S.
5. (Original) The method of claim 4 wherein said H₂S is measured by fluorescence or is measured by absorbance.
6. (Original) The method of claim 1, wherein the SAHH comprises an amino acid sequence encoded by SEQ ID NO:1.
7. (Currently Amended) A kit for assaying a sample containing S-adenosylmethionine (SAM) SAM, the kit comprising S-adenosyl homocysteine hydrolase SAHH or His•SAHH (N-terminal histidine tagged SAHH), N-methyltransferase (GMT) GMT, glycine and instructions for use.

8. (Currently Amended) ~~An assay~~ A method for determining S-adenosylmethionine SAM concentration comprising:
a biological sample containing SAM; and
an effective amount of glycine N-methyltransferase (GMT) GMT, glycine, and S-adenosyl homocysteine hydrolase (SAHH) SAHH or His•SAHH N-terminal histadine tagged SAHH (His•SAHH),

wherein SAHH or His•SAHH activity results in a product that is capable of being measured to determine the amount of SAM in the sample.

9-21 (Withdrawn)